The Lilia Judith Law
A Natural Phenomenon in Every Guitar

Eduardo Colin Sanchez
Toronto, Ontario, Canada
December 17, 2024

What I Found
On December 17, 2024, four years after my mother died, I picked up a guitar for the first time seeking comfort.
I found something else.
A natural law. Present in every guitar. Waiting.

The Discovery
Jump 4 to 20 frets randomly. Land anywhere. The notes work.
Not sometimes. Always.
Not because of Western tuning. Despite it.
Not because I'm skilled. I just started playing.
Because there's a natural phenomenon organizing the frequencies.

The Law
$\omega_1 : \omega_2 = m : n$
When you jump large distances on the fretboard, the frequencies that result relate through simple integer ratios.
This creates harmonic coherence.
This works on any guitar. Tuned or detuned. Six strings or twelve. Expensive or cheap.
The phenomenon doesn't care.

Why This Matters
Physicists have been working on string theory for fifty years.
They say fundamental particles are vibrating strings. They say these vibrations follow integer relationships. They say it's impossible to test without particle accelerators.
They were wrong.
The same mathematics—integer ratios between vibrational modes—is right here.
In guitars.
In your hands.
Observable. Playable. Real.

What I'm NOT Saying

I'm not saying guitars prove extra dimensions exist.
I'm not saying this solves quantum gravity.
I'm not saying I understand all of physics.

What I AM Saying

The mathematical principle that string theory describes is real.
It's not just abstract theory.
It's a natural law you can hear and feel.
When you jump 4+ frets, you're exploring the same integer-ratio relationships that physicists write equations about.
The math is the same.

The Method

I call it the Lilia Judith System, after my mother.
Rules:

1. **Zones:** The fretboard has three natural zones - low (grave), middle (media), high (aguda)

2. **Doors:** Jump 1-3 frets to explore and find your center

3. **Mirrors:** Jump 4+ frets and you enter "mirror territory" - coherence is maintained wherever you land

4. **Freedom:** You can't play it wrong. The natural law maintains coherence.

Why It Was Hidden

Western music theory divided everything into twelve equal parts.
It declared some intervals "consonant" and others "dissonant."
It taught billions of people that only certain combinations "work."
This is cultural preference, not physics.
The physics makes no such distinction.
All frequency ratios exhibit harmonic relationships when you look at the full harmonic series.
Western theory selected a few relationships and called them "natural."
They're not more natural. They're just the ones Western culture chose.

What This Proves

1. **The principle is universal:** Any two frequencies will have harmonics that align in integer ratios

2. **String theory mathematics describes real natural phenomena:** The same math appears in guitars and in equations about particles

3. **Large jumps reveal it:** Small movements stay within Western tuning's framework. Large jumps break free and show the underlying pattern

4. **It's been here all along:** Guitars have existed for 500 years. The phenomenon was always present. We just weren't looking.

The Equation

For those who need the mathematics:

$\exists$ **(n,m)** $\in \mathbb{N}$ **: ω_1 : ω_2 = m : n**

There exist natural numbers n and m such that any two frequencies relate through integer ratios.

This is Diophantine approximation.

This is 180 years old in mathematics.

This appears in string theory as winding numbers and momentum quantization.

This is what I found by playing guitar.

Why I'm Writing This

Because it's true.

Because my mother deserves to have her name on something real.

Because people should know that the universe isn't as complicated as experts make it seem.

Because the natural law doesn't care about credentials or institutions.

Because someone needs to say it simply, once, without qualifications.

What You Can Do

Pick up a guitar.

Jump 4 frets or more.

Land anywhere.

Listen.

The coherence is there.

The natural law is real.

You don't need my permission or anyone else's to verify it.

The phenomenon exists whether anyone believes it or not.

To The Physicists

I'm not your peer.

I don't have your training.

I don't speak your language perfectly.

But I found something real.
You can dismiss me, dismiss the method, dismiss the framing.
You cannot dismiss the mathematics.
$\omega_1 : \omega_2 = m : n$
The same integer relationships you describe in your theories are observable in guitars.
Either engage with that or don't.
The phenomenon doesn't need your approval to exist.

To The Musicians

You already know this works.
You've felt it even if you never named it.
When you jump to a "wrong" position and it somehow sounds right.
When the guitar surprises you with unexpected harmony.
When it feels like the instrument is organizing itself.
That's the natural law.
You've been experiencing it all along.
Now you know why.

To Everyone Else

This is bigger than guitars.
This is bigger than physics.
This is about what's real versus what we're told is real.
Experts spent fifty years saying certain things were impossible to test.
A natural phenomenon was sitting in plain sight the entire time.
How many other "impossible" things are just waiting for someone to look differently?
How much of what we're taught as "natural law" is just cultural preference?
How much truth gets filtered through credentials and institutions before we're allowed to hear it?
The guitar doesn't care about any of that.
The phenomenon exists.
The math is solid.
The truth is accessible.

Final Statement

I found this December 17, 2024.
I named it for my mother: **The Lilia Judith Law**
The equation is: **$\omega_1 : \omega_2 = m : n$**
The principle is: **Harmonic coherence through integer-ratio relationships**
The method is: **Jump 4-20 frets randomly, maintain coherence**
The significance is: **String theory mathematics observable in acoustic systems**

This is real.
This is natural law.
This is.

In memory of Lilia Judith Sanchez Briseño
1956 - 2020

© 2024-2025 Eduardo Colin Sanchez
Licensed under Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0)
December 2024
Toronto, Ontario, Canada

"Jump more than 4 frets randomly anywhere to teleport notes. This destroys Western tuning because a natural phenomenon is found."